



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2007-11-04R1

Effective Date: 21 Dec. 2007

The following Brazilian Airworthiness Directive (AD), issued by the Agência Nacional de Aviação Civil (ANAC) in accordance with provisions of Chapter IV, Title III of Código Brasileiro de Aeronáutica - Law No. 7,565 dated 19 December 1986 - and Regulamento Brasileiro de Homologação Aeronáutica (RBHA) 39, applies to all aircraft registered in the Registro Aeronáutico Brasileiro. No person may operate an aircraft to which this AD applies, unless it has previously complied with the requirements established herein.

AD No. 2007-11-04R1 - EMBRAER - Amendment 39-1224.

APPLICABILITY:

This Airworthiness Directive is applicable to all Embraer EMB-145 and EMB-135 aircraft models of serial numbers (S/N) 145002 thru 145362, 145364 thru 145590, and 145592 thru 14500987.

CANCELLATION / REVISION:

This AD cancels and supersedes the AD No. 2007-11-04 original issue – Amdt 39-1223, dated 21 Dec. 2007, and is being issued to modify the technical content and the compliance time.

REASON:

It has been found the occurrence of smoke in the flight deck originated from Pitot 1/2 and TAT 1/2 current sensor relays and yours respective sockets, caused by poor electrical contacts between those relays and their sockets.

Since this condition affects flight safety, a corrective action is required. Thus, sufficient reason exists to request compliance with this AD in the indicated time limit.

REQUIRED ACTION:

Inspection of Pitot 1/2 and TAT 1/2 current sensor relays and sockets; replacement, if necessary, of the A1 and C1 socket electrical contacts, or of the entire socket; and sockets re-identification.

COMPLIANCE:

Required as indicated below, unless already accomplished.

Within the next 2500 flight hours or 24 months after the effective date of this AD, whichever occurs first, accomplish the following:

- (a) Perform a Detailed Inspection (DET) on Pitot 1 (K0053), Pitot 2 (K0054), TAT 1 (K0064) and TAT 2 (K0494) current sensor relays for possible damage caused by overheating in their contacts, enclosure and finishing material;
 - (1) If current sensor relays K0053, K0054, K0064 and K0494 are not found to be damaged, they can be reinstalled on the aircraft;
 - (2) If any of the current sensor relays K0053, K0054, K0064 and K0494 is found to be damaged, it must be replaced by a new one of the same part number (P/N) CS500-060-D4A.
- (b) Perform a DET on Pitot 1 (XK0053), Pitot 2 (XK0054), TAT 1 (XK0064) and TAT 2 (XK0494) sockets for possible damage caused by overheating in their contacts, enclosure and finishing material;
 - (1) If sockets XK0053, XK0054, XK0064 and XK0494 are not found to be damaged, they can be reused only if a rework is done to replace electrical contacts A1 and C1 by new ones of P/N M39029/92-536. After being reworked, the sockets must be re-identified from P/N S500-9140 to S500-9140-A, and the electrical codes must be changed from XK0053, XK0054, XK0064 and XK0494 to XK1243, XK1242, XK1245 and XK1244, respectively.

- (2) If any of the sockets XK0053, XK0054, XK0064 and XK0494 is found to be damaged, it must be replaced by a new one of P/N S500-9140-A or S500-9216.

NOTE: For the purpose of this AD, a detailed inspection (DET) is: "An intensive examination of a specific item, installation or assembly to detect damage, failure or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate access procedures may be required."

The detailed instructions and procedures to accomplish this AD are described in the Embraer Service Bulletins Nos. 145-30-0052 original issue or 145LEG-30-0019 original issue, or further respective revisions approved by the ANAC.

Record compliance with this AD in the applicable maintenance log book.

CONTACT:

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NOTE: Original in Portuguese language signed and available in the files of the Aeronautical Products Certification Branch (GGCP) of the National Civil Aviation Agency (ANAC).